

Structure Policy Directive

<i>Number:</i>	SPD 1-4
<i>References:</i>	None
<i>Effective Date:</i>	June 30, 2017
<i>Supersedes:</i>	September 1, 2014

<i>TITLE</i>	Quality Management System for Bridge and Transportation Structures
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DIRECTIVE

This Structure Policy Directive (SPD) establishes the expectations and framework for the Quality Management System (QMS) used to manage bridge and transportation structure quality in California. The QMS will be in accordance with the International Organization for Standardization (ISO) 9001 – Quality Management Systems - Requirements, and will consist of both a strategic QMS and operational QMS's.

INTENDED RESULTS

In accordance with the California Bridges and Structures Strategic Direction Objective #6 “Assure Quality”, this SPD ensures that quality measures for all bridge and transportation structures located on public roads are consistent in performance and value to the traveling public.

The Structure Policy Board (SPB) will develop and maintain a strategic QMS for bridges and transportation structures across the State of California conforming to ISO 9001 standards.

Organizations responsible for delivery or asset management of bridges and transportation structures will use this strategic QMS to develop their own QMS's that conform to ISO 9001 standards. These QMS's will help guide the planning, design, delivery and asset management of bridges and transportation structures, and will ensure that quality measures for transportation products and services are effective, consistent, and transparent in accordance with applicable policies, standards and guidance.

These QMS's will ensure that all activities across the State will be aligned to *"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability."* Collectively, this will help to:

- Create an overall QMS for bridge and transportation structure quality inclusive of all activities.
- Ensure fulfillment of Quality Assurance obligations outlined in the Code of Federal Regulations, as well as the requirements of stakeholders.
- Increase efficiency, time saving and cost reduction for bridge and transportation structure work, while still meeting system needs.
- Provide for greater awareness and management accountability.
- Create a system of continual improvement in operations.
- Provide avenues for staff and stakeholders to bring issues forward and affect change.
- Establish a responsible process of corrective and preventive actions.
- Assist with clear communication.
- Provide the potential for certification in accordance with the requirements of ISO 9001 standards.

BACKGROUND

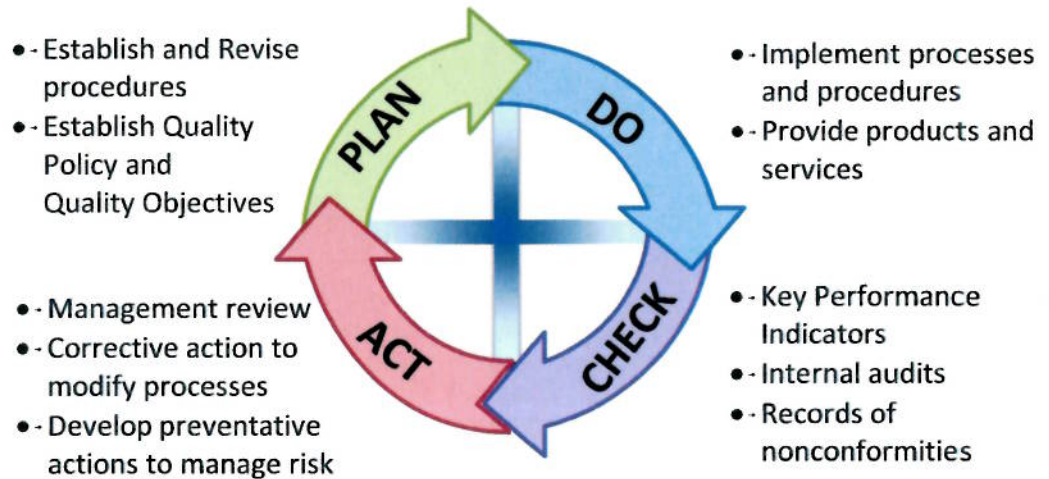
While California's transportation agencies have been addressing quality since the inception of the State Highway System, the needs of modern transportation have prompted many updates to how quality is maintained and assured. Continual reappraisal of quality management systems is needed to provide confidence in California's world class infrastructure and drive economic growth for years to come.

All entities engaged in planning, design, construction and maintenance of bridges and transportation structures are expected to align their activities within the strategic QMS. In addition to the high-level integration of procedures, roles and responsibilities, the strategic QMS will guide overall structure quality management by establishing a system for the development and consideration of Key Performance Indicators (KPI's) at the strategic level. Organizations will align with the strategic QMS and will establish their KPI's at the operational level.

As the framework for the new system, the ISO 9001 requirements have been selected as a quality management framework. Being the most widely-used quality management framework in the world, it is compatible with any size or type of organization.

The ISO 9001 standards have a proven ability to increase efficiency and stakeholder satisfaction by adopting mechanisms for ongoing management review and a "continuous improvement" philosophy. ISO 9001 standards also establish a process to continually measure, communicate, and improve procedures. This process is known as the "Plan-Do-Check-Act"

methodology, and is illustrated in the figure below:



RESPONSIBILITIES

Structure Policy Board:

- Develop and implement a QMS conforming to ISO 9001.
- Manage and Monitor progress towards full implementation by 2020.

Organizations delivering or managing bridges and transportation structures:

- Adopt and follow guidelines of the strategic QMS established by the SPB.
- Develop and implement operational QMS's conforming to ISO 9001 standards.
- Regularly communicate progress on KPI's to the SPB.

APPLICABILITY

All involved in the delivery and asset management of bridges and transportation structures in California.

The members of the Structures Policy Board hereby approve this Directive.

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